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PATENT
Attorney Docket No.: A-69795/DJB/JJD

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

MACK et al.

Serial No. 09/733,757

Filed: December 8, 2000

For: NOVEL METHODS OF DIAGNOSING COLORECTAL CANCER, COMPOSITIONS, AND METHODS OF SCREENING FOR COLORECTAL CANCER MODULATORS

Examiner: Unknown

Group Art Unit: Unknown

CERTIFICATE OF MAILING

I hereby certify that this correspondence, including listed enclosures, is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: BOX MISSING PARTS, Assistant Commissioner for Patents, Washington, DC 20231 on

Dated May 8, 2001

Signed Monica E Carlos
Monica E Carlos

PRELIMINARY AMENDMENT RE: SEQUENCE LISTING

BOX MISSING PARTS
Assistant Commissioner for Patents
Washington, DC 20231

Sir:

This amendment is in response to the Notice to File Missing Parts of Nonprovisonal Application dated March 29, 2001. Prior to substantive examination of the present case, Applicants offer the following amendments and remarks.

The Commissioner is authorized to charge any fees, including extension fees, which may be required, or credit any overpayment to Deposit Account No. 06-1300 (Our Order No. A-69795/DJB/JJD).

Please amend the application as follows and to comply with requirements for patent applications containing nucleotide sequence and/or amino acid sequence disclosures in adherence with rules 37 C.F.R. § 1.821-1.825:

IN THE SPECIFICATION

Please replace the paragraph beginning at page 5, line 9, with the following rewritten paragraph:

– Figure 1 (SEQ ID NO:1) shows an embodiment of a nucleic acid (mRNA) which includes a sequence which encodes a colorectal cancer protein provided herein, CBK8 (SEQ ID NO: 2). The start (ATG) and stop (TAA) codons are underlined. The bold sequence is substantially complementary to that of accession no. AW136973. –

Please replace the paragraph beginning at page 5, line 13, with the following rewritten paragraph:

– Figure 2 (SEQ ID NO:2) shows an embodiment of an amino acid sequence of CBK8. Each of the two sequences in bold corresponds to a Band 4.1 domain. The sequence underlined corresponds to a Pleckstrin domain. –

Please replace the paragraph beginning at page 6, line 31, with the following rewritten paragraph:

– In a preferred embodiment, the colorectal cancer sequences are those of nucleic acids encoding CBK8 or fragments thereof. Preferably, the colorectal cancer sequence is that depicted in figure 1 (SEQ ID NO:1), or a fragment thereof. Preferably, the colorectal cancer sequences encode a protein having the amino acid sequence depicted in figure 2 (SEQ ID NO:2), or a fragment thereof. –

Please replace the paragraph beginning at page 12, line 23, with the following rewritten paragraph:

– The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. For example, cytokine receptors are characterized by a cluster of cysteines and a WSXWS (W= tryptophan, S= serine, X=any amino acid) motif (SEQ ID NO:3). Immunoglobulin-like domains are highly conserved. Mucin-like domains may be involved in cell adhesion and leucine-rich repeats participate in protein-protein interactions. –

Please replace the paragraph beginning at page 14, line 9, with the following rewritten paragraph:

– In a preferred embodiment, the sequences which are used to determine sequence identity or similarity are selected from the sequences set forth in the figures, preferably that shown in Figure 1 (SEQ ID NO:1) and fragments thereof. In one embodiment the sequences utilized herein are those set forth in the figures. In another embodiment, the sequences are naturally occurring allelic variants of the sequences set forth in the figures. In another embodiment, the sequences are sequence variants as further described herein. –

Please replace the paragraph beginning at page 43, line 1, with the following rewritten paragraph:

– In a preferred embodiment, as outlined above, screens may be done on individual genes and gene products (proteins). That is, having identified a particular colorectal cancer gene as important in a particular state, screening of modulators of either the expression of the gene or the gene product itself can be done. The gene products of colorectal cancer genes are sometimes referred to herein as "colorectal cancer proteins" or "colorectal cancer modulating proteins" or "CCMP". Additionally, "modulator" and "modulating" proteins are sometimes used interchangeably herein. In one embodiment, the colorectal cancer protein is termed CBK8. CBK8 sequences can be identified as described herein for colorectal cancer sequences. In one embodiment, a CBK8 protein sequence is as depicted in Figure 2 (SEQ ID NO:2). The colorectal cancer protein may be a fragment, or alternatively, be the full length protein to the fragment shown herein. Preferably, the colorectal cancer protein is a fragment. In a preferred embodiment, the amino acid sequence which is used to determine sequence identity or similarity is that depicted in figure 2. In another embodiment, the sequences are naturally occurring allelic variants of a protein having the sequence depicted in figure 2. In another embodiment, the sequences are sequence variants as further described herein. –

On page 64, immediately preceding the claims, please insert the enclosed text entitled "SEQUENCE LISTING".

IN THE CLAIMS:

Please replace Claim 27 with the following rewritten claim:

– 27. A method for inhibiting colorectal cancer in a cell, wherein said method comprises administering to a cell a composition comprising antisense molecules to a nucleic acid of figure 1 (SEQ ID NO:1). –

REMARKS

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made."

These amendments are made in adherence with 37 C.F.R. § 1.821-1.825. This amendment is accompanied by a floppy disk containing the above named sequence listing, SEQUENCE ID NUMBERS 1-3, in computer readable form, and a paper copy of the sequence information. The computer readable sequence listing was prepared through use of the software program "Patent-In" provided by the PTO. The information contained in the computer readable disk is identical to that of the paper copy. This amendment contains no new matter.

Applicant submits that this amendment, the accompanying computer readable sequence listing, and the paper copy thereof serve to place this application in a condition of adherence to the rules 37 C.F.R. § 1.821-1.825.

Please direct any calls in connection with this application to the undersigned at (415) 781-1989.

Respectfully submitted,

FLEHR HOHBACH TEST
ALBRITTON & HERBERT LLP

Dated: May 8, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

Paragraph beginning at page 5, line 9 has been amended as follows:

– Figure 1 (SEQ ID NO:1) shows an embodiment of a nucleic acid (mRNA) which includes a sequence which encodes a colorectal cancer protein provided herein, CBK8 (SEQ ID NO: 2). The start (ATG) and stop (TAA) codons are underlined. The bold sequence is substantially complementary to that of accession no. AW136973. –

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Paragraph beginning at page 12, line 23, has been amended as follows:

– The extracellular domains of transmembrane proteins are diverse; however, conserved motifs are found repeatedly among various extracellular domains. Conserved structure and/or functions have been ascribed to different extracellular motifs. For example, cytokine receptors are characterized by a cluster of cysteines and a WSXWS (W= tryptophan, S= serine, X=any amino acid) motif (SEQ ID NO:3). Immunoglobulin-like domains are highly conserved. Mucin-like domains may be involved in cell adhesion and leucine-rich repeats participate in protein-protein interactions. –

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Paragraph beginning at page 43, line 1, has been amended as follows:

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On page 64, immediately preceding the claims, the enclosed text entitled "SEQUENCE LISTING" was inserted into the text.

IN THE CLAIMS:

Claim 27 has been amended as follows:

– 27. A method for inhibiting colorectal cancer in a cell, wherein said method comprises administering to a cell a composition comprising antisense molecules to a nucleic acid of figure 1 (SEQ ID NO:1). –